APPENDIX B

MITIGATION MONITORING AND REPORTING PLAN

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MITIGATION MONITORING AND REPORTING PLAN

1.0 INTRODUCTION

1.1 PROJECT OVERVIEW

Sempra Communications seeks authorization from the CPUC to implement a Telecommunications Program and operate as a facilities-based local exchange and inter-exchange carrier serving residential and commercial customers within identified geographical areas throughout the state of California. Sempra Communications' Telecommunications Program is intended as a guide for planning and implementing telecommunications facilities and providing services to customers in primarily urbanized areas throughout 15 counties in California. The project proposes several methods for installation of fiber optic cable and related facilities including inserting into existing conduit, open trench, plow, horizontal directional bore, aerial attachments, and transmission tower attachments (i.e., replacement of optical ground wiring).

The CPUC, as the state lead agency under the California Environmental Quality Act (CEQA), may determine that Sempra Communications' construction and operation of fiber optic cable facilities will serve public convenience and necessity, provided that the subsequent activities will have no significant impact on the quality of the environment. The proposed project would cross many jurisdictions and may require approvals and permits from various federal, state, and local agencies.

1.2 PURPOSE OF THIS PLAN

The purpose of the Program EIR and this Mitigation Monitoring, and Reporting Plan (MMRP) is to establish a clear process for obtaining approval for subsequent actions requiring construction, to ensure compliance with the mitigation measures identified in the Program EIR, and to ensure that Sempra Communications obtains and complies with both local ordinances and conditions of permits that may be required from trustee and responsible agencies.

The CPUC has the authority under the Public Utilities Code to regulate the terms of services, and the safety, practices, and equipment of utilities under its jurisdiction. When adopting an Environmental Impact Report, an agency must also adopt a program for reporting and monitoring mitigation measures that were adopted or made conditions of project approval pursuant to Public Resources Code (PRC), Section 21081.6(a) and State CEQA Guidelines, Sections 15091(d) and 15097. The MMRP is prepared to ensure the mitigation measures and project revisions identified in the Program EIR are implemented.

Sempra Communications is required to implement the mitigation measures identified in the Program EIR (and included in this MMRP) to avoid significant impacts on environmental resources. These mitigation measures are adopted as part of the Program EIR. The MMRP provides guidance to Sempra Communications and its environmental monitoring team, the CPUC and its environmental consultant, and local, state, and federal resource agencies. The program guides monitoring efforts throughout the preconstruction, construction, and post-construction periods.

The purpose of this MMRP is to:

- clearly identify a monitoring and reporting protocol for mitigation measures that have been approved by the CPUC (CEQA lead agency for the project), trustee agencies, and responsible agencies;
- provide guidelines on monitoring roles and responsibilities; and,
- define compliance levels, performance standards, and reporting and variance procedures.

1.3 RESPONSIBLE AND TRUSTEE AGENCIES

Federal, state, and local agencies, including but not limited to the following, may issue permits or authorizations for subsequent activities and may have roles in overseeing environmental compliance for those actions:

- U.S. Army Corps of Engineers (USACE)
- U.S. Fish and Wildlife Service (USFWS)
- National Marines Fisheries Service (NMFS)
- State Historic Preservation Officer (SHIPO)
- California State Lands Commission (SLC)
- California Department of Fish and Game (DFG)
- regional water quality control boards (RWQCBs)
- regional air quality districts
- local counties and cities

The lead agency (CPUC) has the primary responsibility for tracking and documenting the completion and implementation of mitigation measures. The CPUC and cooperating agencies have legally mandated authority and responsibility to enforce any laws, ordinances, and regulations which could be violated during construction. While there is a clear benefit in coordinating the activities between the cooperating agencies with the lead agency, it is also understood that none of the federal or state agencies with legal enforcement mandates have in any way waived their enforcement authority.

When a violation of a permit condition or mitigation measure is documented in the field, it is the responsibility of each agency to determine the appropriate compliance and enforcement action. For this reason, compliance and enforcement actions will be coordinated through the lead agency. The lead agency may enforce conditions and seek resolution of disputes, enforce permit conditions, and otherwise ensure compliance. Cooperating agencies should allow the lead agency to carry out its enforcement responsibilities in a coordinated fashion; however, even where the

lead agency initiates a compliance and enforcement action, further action by any of the cooperating agencies is not precluded.

2.0 ROLES AND RESPONSIBILITIES

The purpose of the monitoring and reporting program is to identify resource issues for each specific project and ensure compliance with the Program EIR and with federal, state, and local conditions and regulations. While the program establishes an orderly process for resolving compliance violations, it does not in any way replace the agencies' respective roles and responsibilities for taking appropriate compliance and enforcement action where necessary. In general, the monitoring program will serve as an early-warning system to:

- identify small problems before they develop into something larger;
- cooperate in the resolution of these problems; and
- document the success or failure of the environmental commitments presented in the PEIR.

The operating philosophy of the monitoring program will be to establish and maintain an ongoing dialogue between the CPUC, Sempra Communications, and the agencies to encourage the best possible implementation of mitigation measures. The objective of the MMRP will be to resolve compliance issues at the lowest possible level. This will be accomplished by establishing and following a communication and dispute resolution process which will provide all parties with the earliest possible notice of a problem and an adequate opportunity to participate in its resolution. Any problems that are not resolved in the field will be elevated to a formal resolution and enforcement process.

Effectiveness of the monitoring program depends on establishing and maintaining an organizational structure that clearly defines the roles and responsibilities of each participant. Because several agencies may be involved in the conditions and regulations of the construction process, it is critical that there be adequate coordination of the various agencies and their permit conditions. This will best be accomplished by developing a clear plan for submitting project documentation to the CPUC for approval, monitoring the field conditions and the applicable environmental commitment measures in the field, and by developing a clear communications protocol.

The following outlines the roles and responsibilities of each of the participants involved in the compliance and monitoring program for this project.

2.1 CPUC AND CPUC MONITOR ROLES AND RESPONSIBILITIES

The CPUC, as the designated lead agency, is responsible for ensuring full compliance with the mitigation measures adopted with the Program EIR for the proposed project. The CPUC may enforce compliance. through the use of a contractor. The CPUC will be responsible for the following activities:

- review all work plans
- issue notice-to-proceed letters

- issue letters of warning and stop work notices
- respond to field modification requests involving needed in-field modifications to project implementation

Under the direction and guidance of the CPUC project manager and staff overseeing the implementation of this MMRP will be responsible for data management, project compliance monitoring and reporting, technical support, scheduling, reporting, and accounting. CPUC's MMRP roles and responsibilities described in this section will involve the following levels:

- project manager
- deputy project manager
- data manager
- compliance monitors
- technical advisors

PROJECT MANAGER

The project manager will be responsible for ensuring that compliance and reporting activities are conducted in accordance with this MMRP. The project manager will also be the primary contact for the CPUC and Sempra Communications and will provide assistance in reviewing all plans, resource documentation, and variance requests. Additionally, the project manager will coordinate with resource and other agencies (if necessary) to receive their approval on field modification requests involving changes to mitigation measures.

DEPUTY PROJECT MANAGER

The deputy project manager will support the project manager and will have the primary responsibility for overseeing resource monitors and ensuring that Sempra Communications has conducted the appropriate level of environmental clearance surveys and provided documentation. The deputy project manager will oversee field implementation and quality assurance of the compliance program, including environmental inspection, specialty monitoring, and flagging and fencing. The deputy project manager's responsibilities include: managing and supporting compliance monitors; coordinating information between Sempra Communications and federal and state agencies; negotiating and resolving any conflicts relevant to environmental compliance; reviewing all project documentation and technical plans; submitting and tracking approval of field modification requests; and performing general troubleshooting on environmental compliance issues.

DATA MANAGER

The data manager will prepare and manage the compliance tracking database. The data manager will provide training in the use of the program and will assist with software- and laptop-associated issues. The data manager will be available to facilitate database queries.

COMPLIANCE MONITORS

The compliance monitors will ensure that all construction activities are performed in accordance with all applicable mitigation requirements, permit conditions, and environmental specifications. They will act as a liaison between construction personnel and field agency representatives. The monitors consist of wildlife biologists, botanists, wetland ecologists, and archaeologists, and will be assigned to those areas requiring their expertise and presence, where necessary. The compliance monitors will be responsible for completing the project activity reports and noncompliance reports.

CPUC compliance monitors shall have the authority to order corrective action and/or stop work to maintain environmental compliance. The monitors will use sound professional judgment in exercising these authorities and will not stop work unless there is a situation that could: 1) cause serious injury or harm to persons or property, 2) harm threatened or endangered species or protected cultural resources, 3) violate certain federal or state codes, 4) violate the terms and conditions of the state or federal right-of-way or permits, 5) deviate from adopted mitigation measures, or 6) is necessary to protect public health and safety or the environment. CPUC compliance monitors will not have the authority to issue a Notice-to-Proceed (NTP); this authority is reserved in all cases to the CPUC.

TECHNICAL ADVISORS

The technical advisors will include biologists, archaeologists, water quality and erosion control specialists, and other resource specialists that may be required to review environmental clearance documents or review plans and specifications for compliance with the mitigation measures.

2.2 SEMPRA COMMUNICATIONS' ROLES AND RESPONSIBILITIES

Sempra Communications' construction and environmental team roles and responsibilities are described below for the following:

- engineering and construction project manager
- construction manager
- contract compliance inspector
- biological and archaeological resource monitors

ENGINEERING AND CONSTRUCTION PROJECT MANAGER

Sempra Communications' engineering and construction project manager is responsible for coordinating with the CPUC project manager and staff, the CPUC contractor's project manager, deputy project manager, compliance monitors, technical advisors, other (including Sempra Communications') resource monitors, all relevant agencies, and Sempra Communications' own engineering and construction representatives to ensure the appropriate clearance surveys are conducted. The engineering and construction project manager is also responsible for resolving conflicts and coordinating resource avoidance and protection. The engineering and construction project manager will patrol the construction site periodically (while maintaining contact with

Sempra Communications' own construction superintendents, supervisors, and/or contract compliance inspectors) to help monitor implementation of the resource protection measures and compliance with other required permits. Additionally, the engineering and construction project manager will coordinate, as necessary, with monitors from the CPUC and any other appropriate agencies.

CONSTRUCTION MANAGER

The construction manager is responsible for managing the construction contractor's activities to ensure all of those activities are completed according to the work plan, including compliance with all mitigation measures and the procedures established in this MMRP. The construction manager will notify the CPUC contractor's project manager of any proposed changes to the proposed activities so that appropriate environmental reviews can be performed and subsequent actions taken (e.g., an NTP, further confirming studies, or additional CEQA review).

CONTRACT COMPLIANCE INSPECTOR

The contract compliance inspectors will be retained by Sempra Communications and will be responsible for ensuring that the plans and specifications are implemented to standard.

SPECIALIZED RESOURCE MONITORS

Qualified biologists and archaeologists will conduct field surveys to identify and document the presence or absence of sensitive resources. The resource specialists will identify for the contractor the necessary protection measures (e.g., fencing or setback buffers). Biologists and archaeologists will be on site during construction, where necessary, to monitor sensitive resource areas and ensure that the mitigation measures and permit conditions are being implemented. Other resource monitors will be called on-site when necessary and may include Native American, paleontological, and water quality or other specialized monitors.

3.0 DOCUMENTATION AND REPORTING

3.1 DAILY-ACTIVITY REPORTS

All monitors (Sempra Communications and/or CPUC) will complete a daily-activity report at the end of each shift. Daily-activity reports will include a summary of the day's activities including locations that were visited and the times they were visited. Reports will record level of compliance per observation and any communications related to each observation. In the event of noncompliance, a report documenting the noncompliance will be provided. The report will include corrective actions needed and an expected implementation date of resolution(s).

3.2 DOCUMENTING OBSERVATIONS AND NONCOMPLIANCE

CPUC compliance monitors will document daily observations and classify them according to the following categories:

- acceptable
- minor problem
- violation
- repeated violation
- serious violation

The level of documentation and communication requirements will vary with the event observed. It is important to document all observations, including those categorized as "acceptable," because the documentation is a method of tracking construction activity and impact, identifying potential trouble-spots before they escalate into resource damage, and resolving noncompliance incidents.

ACCEPTABLE

An activity is considered acceptable when resources are protected in accordance with mitigation measures and permit conditions.

MINOR PROBLEM

Minor problems are technical violations that occur in very limited areas and have little or no immediate environmental consequence associated with them. Identification of a minor problem is an early warning to impending problems and the possibility of violation. By identifying minor problems it is expected that more severe problems will be avoided. It should be noted, however, that Sempra Communications retains full responsibility for the implementation of all mitigation measures.

Table A-1 identifies examples of minor problems and the protocol for documenting a minor problem.

VIOLATION

A violation is an incident that is isolated but is severe enough to warrant a specific and timely correction. Correction of a violation may be scheduled to take place within days and will require specific action by Sempra Communications and follow-up monitoring by the CPUC or its contractor to clear the noncompliance report.

Repeated violations may be treated as a severe violation. For example, if Sempra Communications had numerous pollution events due to breaks of fuel or hydraulic fluid lines, and the contractor failed to improve maintenance or otherwise avoid the problem, the situation might be treated much more seriously. More significant enforcement should be expected in such a case.

Table A-2 identifies examples of violations and the protocol for documenting a violation.

TABLE A-1
EXAMPLES OF MINOR PROBLEMS AND PROTOCOL FOR DOCUMENTING A MINOR PROBLEM

Examples of Minor Problems	Protocol
• Lack of maintenance of erosion or sediment control measures over a small area (see SWPPP) • Parking or driving outside the construction right-of-way in non-sensitive areas • Failure to pick up trash or store equipment and materials properly • Personnel present beyond limits of construction in non-sensitive areas • Failure to maintain orange construction barrier fencing or staking/flagging for resource protection • Small hazardous material spill in non-sensitive area (if spill is not cleaned up within 24 hours then the incident becomes a violation)	***Sempra Communications is responsible for:*** 1. Identifying the problem. 2. Discussing the problem with the Sempra Communications contract compliance inspector and agency monitors and identifying corrective measures. 3. Documenting the conversation and actions taken in the Daily Activity Report. 4. Reinspecting site to ensure minor problem has been resolved. ***CPUC Monitor is responsible for:*** 1. Discussing the incident with Sempra Communications and its contractor. 2. Revisiting site to ensure problem was addressed as necessary.

SERIOUS OR REPEATED VIOLATION

A serious violation involves a relatively large area and/or a more serious threat to the environment. A serious violation requires rapid correction and immediate notification. Once notified of a serious violation, the deputy project manager shall respond to the site as soon as possible, oversee the collection of information, and communicate as soon as possible with the project manager, the lead agencies and cooperating agencies as appropriate. Upon completion of the noncompliance report, the deputy project manager will transmit via modem or facsimile machine a copy of this report to the CPUC, appropriate resource agencies, and Sempra Communications. A meeting or conference call will be scheduled between the lead agencies, project management, and cooperating agencies to discuss the noncompliance report and the proper corrective action and follow-up enforcement actions that should be imposed. Upon agreement between the agencies as to the enforcement and corrective actions, the CPUC and/or project manager will communicate these actions to Sempra Communications. It is then anticipated that Sempra Communications would communicate these details to the contract compliance inspector and construction personnel and that the corrective actions would be implemented as rapidly as possible.

TABLE A-2
EXAMPLES OF VIOLATIONS AND PROTOCOL FOR DOCUMENTING A VIOLATION

Examples of Violations	Protocol
• Lack of maintenance of erosion or sediment control measures over a large area • Establishing staging areas or wash stations within 50 feet of a sensitive resource • Driving or parking outside the construction zone in sensitive resource areas • Trenching or plowing outside the construction zone in non-sensitive resource areas • Bentonite frack-out in a non-sensitive stream (e.g., a stream that does not provide habitat for special-status species) • Unauthorized in-water work (including vehicle access) in a non-sensitive stream • Construction activities within a sensitive resource buffer zone that does not affect resource and is identified early and corrected • Unauthorized minor disturbance to a sensitive wetland or woody riparian habitat • Use of an unapproved staging and storage area that does not support sensitive resources • Equipment is not cleaned at noxious weed cleaning stations identified by the field monitors • Trenches are left open overnight and do not result in harm to a special-status species, livestock, or human. • Unauthorized construction within no-disturbance buffer zones for special-status raptor nests	***Sempra Communications is responsible for:*** 1. Identifying the problem. 2. Discussing the problem with the Sempra Communications contract compliance inspector. 3. Verbally explaining the problem to the CPUC monitor. 4. Documenting the conversation in the daily activity report and any actions taken and completing a noncompliance report. 5. Faxing or e-mailing the noncompliance report to CPUC monitor and contacting appropriate agencies within 24 hours of incident. ***CPUC Monitor is responsible for:*** 1. Reporting incident as soon as possible to the CPUC. 2. Faxing or e-mailing copy of noncompliance report to the CPUC within 24 hours. 3. Reinspecting site with Sempra Communications to ensure the violation has been resolved, completing and submitting a noncompliance resolution report to the CPUC. ***CPUC is responsible for:*** 1. Reviewing and signing noncompliance report 2. Reviewing and signing noncompliance resolution report 3. Possible issuing of warning letter.

When a violation is repeated, has not been corrected by the resolution date, or has resulted from clear negligence on the part of Sempra Communications' contractor, the compliance monitor will document the nature of the noncompliance and report it to the deputy project manager. If it is a serious violation and there are safety concerns, the first priority is to secure the scene. The compliance monitor will have the authority to delegate the filing of the noncompliance report.

The plan for corrective action will identify specifically what Sempra Communications shall do to correct the identified problem and in what timeframe such corrections shall be completed. The deputy project manager may also schedule a re-inspection of the site to confirm that the corrective measures were fully implemented and that they were indeed effective. Once the problem has been fully corrected, the deputy project manager or compliance monitor will complete a noncompliance resolution report.

Table A-3 identifies examples of serious or repeated violations and the protocol for documenting a serious violation. This table also lists examples of serious violations that may warrant a verbal stop work notice.

4.3 COMPLIANCE ENFORCEMENT DOCUMENTATION

The level of enforcement action required to correct compliance violations will depend upon the severity of the violation and the jurisdictional agencies involved in reviewing the corrective action and its timeframe. Compliance enforcement will occur through the following:

- daily-activity reports
- letter of warning
- suspension of construction

DAILY-ACTIVITY REPORTS

Corrective actions to violations will be tracked using an electronic database. A noncompliance report issued will need to be closed with a complementary filing of a noncompliance resolution report. The resolution report will be submitted along with the daily-activity report on the day the violation has been corrected.

LETTER OF WARNING

A letter of warning may be issued by the CPUC in the event of repeated simple violations which have not had adequate correction measures applied. A letter of warning may be provided to Sempra Communications as an intermediate step prior to stop work or revocation of permit due to noncompliance. A letter of warning may only be issued by the CPUC, trustee agency, or responsible agency.

TABLE A-3.
EXAMPLES OF SERIOUS VIOLATIONS AND PROTOCOL FOR DOCUMENTING A SERIOUS VIOLATION

Examples of Serious Violations	Protocol
Serious Violations that Warrant Stop Work Notices • Construction activities are conducted within exclusion zones that result or have potential to result in a significant level of disturbance to a sensitive biological or cultural resources • Unauthorized in-water work in a stream that supports federal or state-listed species • Failure of erosion control during rain or storm event that results in substantial sedimentation problems • Harm to a state or federally listed species • Unauthorized significant disturbance to a sensitive wetland or woody riparian habitat • Hazardous materials spill that affects or has the potential to affect a sensitive resource or human health • Construction activities that restrict water flow causing a serious condition • ***Serious Violations that May Not Warrant Stop Work Notices*** • Construction activities in areas known or which have the potential to support special-status species or sensitive habitats that have not been staked and flagged • Construction outside the 20-foot-wide construction zone in sensitive resource areas and results in significant disturbance to a sensitive resource • Trenches are left open overnight, resulting in significant harm to a special-status species, livestock, or human. • Inadequate erosion control in place prior to construction during the rainy season • Construction activity in violation of any permit requirements that would cause serious impact to a sensitive species or habitat	***Sempra Communications is responsible for:*** 1. Identifying the problem and determining if the violation warrants a stop work notice. 2. Immediately notifying the CPUC monitor and appropriate resource agencies 3. Discussing the problem with the Sempra Communications contract compliance inspector and identifying corrective measures 4. Completing a noncompliance report 5. Documenting the conversation(s) in the daily activity report ***CPUC Monitor is responsible for:*** 1. Immediately notifying the CPUC 2. Coordinating with Sempra Communications to identify and implement corrective measures 3. Reinspecting site with Sempra Communications 4. Working with field monitors to complete a non-compliance resolution report and faxing or e-mailing a copy to the CPUC ***CPUC is responsible for:*** 1. Reviewing and signing non-compliance report 2. Probable issuing of warning letter 3. Possible issuing of stop work notice.

SUSPENSION OF CONSTRUCTION (STOP WORK)

A stop work notice can be issued by the CPUC or responsible and trustee agencies. A stop work notice may be issued against a particular activity (e.g., backhoe digging in a creek) or against the entire action. A stop work notice may be issued verbally; however, at its earliest convenience, the issuing agency shall document the stop work notice and provide copies to the other agencies and Sempra Communications. The documentation will outline the reason for the issuance of a stop work notice, the actions necessary to have the stop work notice released and the documents or actions that are necessary for Sempra Communications to request release from the stop work notice.

4.4 DOCUMENTING AND REPORTING EMERGENCY EVENTS

In the event of an emergency or crisis, an incident commander will be assigned to manage the resolution of the incident. Examples of emergency situations include medical emergencies, severe environmental events, or hazardous materials incidents. The incident commander will be responsible for the following activities:

- promptly confirming that all appropriate public health and safety agencies have been notified of any immediate danger to the public;
- promptly notifying appropriate agency representatives;
- accurately gathering and confirming the necessary information from all parties involved in the incident;
- developing a resolution in consultation with appropriate parties (Sempra Communications, agencies, construction and environmental management, the contractor and the landowner);
- obtaining and documenting concurrence and/or approval from the appropriate agencies or individuals; and
- implementing and documenting the resolution (including any follow-up calls to interested agencies or individuals).

If the incident is a hazardous-material spill or the discovery of a hazardous material (of known or unknown constituents) in potentially significant quantities, specific reporting protocols must be followed. The protocols will be developed as part of the spill prevention and contingency plan.

5.0 FIELD MODIFICATION PROCESS

This section outlines the process that Sempra Communications will follow for field modification that result in deviations from the project description as approved in the Program EIR, or for any construction, operation, or maintenance activity or practice that is not carried out in accordance with approved plans, mitigation measures, or permit conditions. Sempra Communications will be responsible for completing a request form for field modifications and for providing environmental information to support field modification requests.

5.1 FIELD MODIFICATIONS

All field modifications must be requested and approved in advance of conducting the modified activities. Grant of modifications will not be considered retroactive and may not be used to dismiss previous conditions of violation. Field modifications can be granted in the field by compliance monitors without further approvals.

A field modification may be authorized for an activity that is site-specific in nature and would modify implementation of a mitigation measure so that the same or elevated level of resource protection is provided and would result in no new (or more severe) impacts. Sempra Communications completes a field modification form and requests authorization of the modification. Field modification approvals may be issued for staging areas, fueling areas, and minor changes in mitigation measures that do not require approval from other agencies.

5.2 PROCEDURES TO REQUEST EMERGENCY MODIFICATIONS

In cases of emergency, if the field modification request is to address an immediate threat to human life or sensitive resources, Sempra Communications shall take the appropriate action to preserve life, prevent any adverse effect on public health and safety, protect the resource, and remove immediate hazard with minimum impacts on other significant environmental resources. A full report on such action shall be filed with the project manager within 72 hours.

6.0. ENFORCEMENT

The CPUC and responsible and trustee agencies have the responsibility and authority to enforce implementation of mitigation measures and permit conditions and will use enforcement actions, if necessary, to ensure that violations of project conditions are corrected. The level of enforcement action required will depend on the severity of the violation, the responsiveness of Sempra Communications and its contractor, and the jurisdictional agencies involved in reviewing the corrective action. Criteria for level of enforcement includes whether the incident was the result of negligence or whether it could not have been anticipated; i.e., if mitigation measures are properly implemented but due to the unusual severity of a storm, stream siltation still occurs.

LETTER OF WARNING

A letter of warning will be issued by the CPUC or by the jurisdictional agency's project management in the event that repeated violations continue to occur and the source of the problem is not rectified. In general, the letter of warning may be provided to Sempra Communications as an intermediate step prior to a stop work notice or the revocation of permit due to noncompliance.

SUSPENSION OF CONSTRUCTION – STOP WORK

A stop work notice can be issued by the CPUC and responsible and trustee agencies if any of the following apply: a construction activity is determined to be a deviation from the approved activity, adopted mitigation measures, permit conditions, or other approval; a sustained pattern of

repeated violations, noncompliance reports, or complaints; or if the action has caused irreversible environmental damage or such damage is imminent. Sempra Communications shall immediately report any unapproved variances and suspension of construction to the program coordinator or compliance monitor. The project manager will coordinate with the CPUC and agencies, as appropriate, to discuss and resolve all stop work notices. Once a resolution had been jointly agreed to, and Sempra Communications has complied with all conditions, the CPUC will clear the stop work notice by issuing a Notice to Proceed, and construction may resume. Sempra Communications and its contractors are bound to discharge and/or observe stop work notices.

Stop work notices can be issued for site-specific activities (e.g., backhoe digging in a creek), or for the entire action. Stop work notices may also be issued to protect cultural or paleontological resources that are uncovered during earth-moving activities.

A stop work notice may be issued verbally; however, at its earliest convenience, the CPUC or other issuing agency shall document the stop work notice and provide copies to the other agencies and Sempra Communications. Whenever a stop work notice is issued, a stop work notice form will be completed and issued to Sempra Communications. The form will detail the reason(s) for the issuance of that notice, the actions necessary to have the notice released, and the documents or actions that are necessary for Sempra Communications to request a release from the stop work condition.

7.0 TRAINING AND COORDINATION MEETINGS

An environmental training program will be provided for all individuals involved with Sempra Communications' projects. The goal of the program is to integrate environmentally responsible work practices into daily operations and standard construction procedures. Management-level staff from the contractor and the construction management team will attend a thorough training program, and construction crews will receive a very specific and targeted program that focuses on individual job responsibilities. In addition, daily/weekly tailgate meetings and monthly coordination meetings will be organized to address monitoring issues.

6.1 ENVIRONMENTAL AWARENESS TRAINING

An environmental awareness training program will be developed to ensure that mitigation measures and any permit conditions are implemented in an appropriate and timely manner. All levels of field management and construction personnel will be informed about environmental protection and the seriousness of noncompliance with environmental and other necessary permits. Training will take place at the Sempra Communications engineering level and at the contractor level. Training seminars led by Sempra Communications and qualified biologists and archeologists will be held before construction to explain and educate construction supervisors and managers about the following:

- the need for and importance of resource avoidance and protection,
- mitigation measures and associated plans (e.g., SWPPP),
- resource mapping format and interpretation of construction drawings,

- resource protection staking methods,
- construction process as it relates to required mitigation measures,
- roles and responsibilities, and
- project management structure and contacts.

All construction crew members will be required to complete a training class. These classes will cover issues such as the environmental issues mentioned above, resource mapping and construction drawing interpretation, roles and responsibilities, and site safety. Appropriate personnel from the CPUC and other regulatory agencies and their contractors will be invited.

6.2 TAILGATE MEETINGS

As a part of their daily field responsibilities, Sempra Communications monitors will coordinate with construction staff to hold tailgate meetings on key environmental issues relevant to particular work crews or locations. Agency monitors will be available to participate in tailgate training sessions as needed. Tailgate training might be required under the following circumstances:

- Prior to activity in known sensitive resource areas (e.g., adjacent to waterways or wetlands, special-status wildlife habitat, known cultural resources).
- Prior to activities requiring activity-specific instruction (e.g., installation of erosion control).
- In the case of repeat or uncorrected noncompliance events (e.g., activity outside of the work area, littering).
- Just prior to the beginning of important natural seasons, such as sensitive species breeding seasons or the wet-weather season.
- Just after discovery of an archaeological site that requires special protection measures.

6.3 COORDINATION MEETINGS

Coordination meetings will be scheduled on a monthly or more frequent basis to discuss construction and environmental compliance issues. The CPUC, Sempra Communications, and resource agencies (when necessary) will attend these meetings. The meetings will be scheduled for a day and time agreed to by all individuals. The coordination meetings will be provide an opportunity for discussing project plans and reviews, stop work notices, permits and mitigation compliance issues, field modification requests, construction schedule update, and general comments or concerns.

7.0 MITIGATION MONITORING REQUIREMENTS

Compliance will be documented using a variety of forms including electronic daily-activity reports, noncompliance report forms, and noncompliance report resolution forms. Examples of the noncompliance report and noncompliance report resolution forms are included in this document. All of the forms will contain tracking numbers and will be able to be cross-referenced to supporting documentation. **Table A-4** identifies the mitigation measures that may be required. These mitigation measures are discussed in detail in the project Program EIR.

TABLE B-4
MITIGATION MONITORING TABLE

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
AESTHETICS				
AES-1: The project could have an adverse effect on a scenic vista or damage a scenic resource.	**AES-1a:** Sempra Communications shall identify all scenic resources within 1,500 feet of the proposed activity and locate all permanent substantial aboveground features a minimum of 1,000 feet away from scenic resources.	The construction crew will be monitored by the assigned Sempra Communications' inspector.	Measured distance from scenic resources.	Must occur simultaneously with construction.
AES-2: Minor changes in the existing visual character or quality of a site could result from project construction and operation.	**AES.2a:** Sempra Communications shall minimize visual impacts of fiber optic cable facilities and comply with local regulations concerning architectural design and landscaping, shall keep construction and staging areas orderly and free of trash and debris, and shall restore areas disturbed by project construction along the proposed route to their pre-project condition.	The construction crew will be monitored by the assigned Sempra Communications' inspector.	Local jurisdiction requirements.	Must occur simultaneously with construction.
AGRICULTURAL RESOURCES				
AGR-1: Inconsistency with applicable land use designations and policies.	**AG.1.a:** The proposed project consistency shall adhere to each County and City ordinance and policy, and be consistent with project area specific goals, policies, and zoning ordinances.	Review County and City ordinances and policies.	Local jurisdiction requirements.	Prior to commencement of construction.

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	AG.1.b: Sempra Communications' shall consult with all potentially affected landowners associated with installation of fiber optic cable facilities in portions of the project area that crosses farmland as part of the right of way use or land acquisition process.	Signed confirmation of consultation with landowners.	Submit a copy of the signed confirmation of the CPUC.	Prior to commencement of construction.
AG.2: Conduit and associated facility installation could result in temporary disruption of agricultural lands.	**AG.2:** Notify landowners of impeding work and restore work site to pre-project conditions.	The construction site will be monitored by the assigned Sempra Communications' inspector.	Provide a copy of the notification to the CPUC.	Upon completion of construction.
AIR QUALITY				
AIR-1: Construction activities could increase local pollutant concentrations of particulate matter (from fugitive dust) and carbon monoxide.	**AIR-1a:** Sempra Communications would require construction contractors to implement the following construction dust abatement program:	Review copy of the construction contract(s) to ensure that dust abatement program elements have been incorporated.	Document incorporation of dust abatement program elements into construction contract(s).	Prior to approval of construction contract..
	• Water all active construction areas at least twice daily;	Inspect construction sites periodically to verify compliance with measure.	Verify compliance with measure through observation of recent watering and lack of visible dust emissions from the site or along roads used to access the site.	Weekly during construction

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• Cover all trucks hauling soil, sand and other loose materials or require all trucks to maintain at least two feet of freeboard; • Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas and staging areas at construction sites; • Sweep daily (with water sweepers) all paved surfaces at construction sites; and • Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.			
	AIR-1b: For subsequent activities located within the jurisdictions of SCAQMD, SDCAPCD, and ICAPCD, Sempra Communications would require construction contractors to implement measures required under SCAQMD Rule 403 (as described above in Section 4.3.1) for high wind and normal wind conditions to reduce PM-10 emissions from the various fugitive dust sources associated with project construction, and maintain the necessary documentation that demonstrates compliance with the rule.	Same as above	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	AIR-1c: For subsequent activities located within the jurisdiction of SJVUAPCD, construction contractors shall implement a dust-abatement program that complies with the District's Regulation VIII Control Measures to reduce the contribution of project construction to local respirable particulate matter concentrations. This program shall include the following measures: • Water, chemical soil stabilizers/suppressants, or vegetative ground cover shall be used to control fugitive dust from all disturbed areas, including storage piles, which are not being actively used at the construction site. • Water or chemical soil stabilizers/suppressants shall be used to control fugitive dust from all unpaved roads on-site and all off-site unpaved access roads to the construction site. • Applications of water or presoaking shall be performed to control fugitive dust from all land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities.	Same as above	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• Cover and wet all materials transported off-site or require all trucks to maintain at least six feet of freeboard from the top of the container. • Remove accumulated mud or dirt from adjacent public streets at least once every 24 hours during construction periods. (The use of dry rotary brushes is expressly prohibited, except where preceded or accompanied by sufficient wetting to limit the visible dust emissions. The use of blower devices is also expressly forbidden.) • Water or chemical soil stabilizers/suppressants shall be used to control fugitive dust after each addition of materials to or removal of materials from all storage piles.			
AIR-2: Emissions from construction activities could add to the regional pollutant loading of the area in air basins where air districts have set significance thresholds for both project construction and operation.	**AIR-2a**: Sempra Communications would require its construction contractors to comply with the following requirements during project construction:	Same as above	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• Use of California on-road diesel fuel for all diesel-powered construction equipment; • Use of construction equipment that is properly tuned and maintained in accordance with manufacturers' specifications; • Use of best management construction practices to avoid unnecessary emissions (e.g., trucks and vehicles in loading and unloading queues would turn their engines off when not in use). • Suspension of emissions-generating construction activities during "Stage 2" smog alerts. Stage 2 air pollution episodes occur under the California Air Pollution Emergency Episode Plan when hourly ozone concentrations reach 0.35 parts per million (CARB, 1998).			

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	AIR-2b: To the extent feasible, Sempra Communications would employ a maximum of number work crews on any given workday, such that daily, quarterly, or yearly levels of significance for each air district shown on **Table 4.3.11** are not exceeded. This would reduce any significant impacts of construction to the regional pollutant burden to a less than significant level.	Same as above	Same as above	Same as above
	AIR-2c: For subsequent activities where implementation of Mitigation Measure AIR-2b is not feasible, Sempra Communications would require the prime construction contractor to use aqueous emulsified fuels instead of diesel fuel. CARB recently certified Lubrizol Corporation's "PuriNOx" as an alternative fuel for diesel engines and the fuel is available commercially. Based on data submitted, CARB has determined that use of PuriNOx reduces NOx emissions by 14 percent and PM-10 emissions by 63 percent.	Same as above	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
AIR-3: Operational emissions associated with subsequent activities could introduce additional emissions into the area that could conflict with the applicable regional air quality plans.	**AIR-3a:** Sempra Communications would limit the use of emergency diesel generators to back-up, nonutility electrical power generation purposes only (or for related testing and maintenance purposes) for an aggregate period not to exceed 200 hours per year as documented by an engine-hour meter or equivalent method;	Construction sites will be monitored by a designated Sempra Communications' inspector.	Regional air quality plans.	During construction.
	AIR-3b: Use of diesel fuel with sulfur content shall not exceed 0.05 percent by weight.	Same as above	Same as above	Same as above
AIR-4: The project could expose sensitive receptors to substantial pollutant concentrations.	Implement Mitigation Measures AIR-3a and -3b.	Same as above	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
BIOLOGY				
BIO-1: Installation and maintenance of cable and supporting equipment and other facilities within or adjacent to undeveloped areas could result in adverse impacts to biological resources in the absence of route surveys to identify specific locations of biological resources within the project area.	**BIO.1a:** Sempra Communications shall retain a qualified biologist to evaluate specific location descriptions, including, as necessary, field assessments of each work plan, and documentation of the findings of this assessment. This evaluation will include a discussion of biological resources with moderate to high potential to be affected by the proposed action, and a brief justification for those not considered further (i.e. those species for which no habitat occurs in the proposed project area or sensitive habitat types not present within the project area). The assessment shall also include a search of most recent CNDDB records for the USGS quads within which the work plan occurs.	Project proponent would retain qualified biologists to perform compliance monitoring and reporting during construction.	Submit names and qualifications of monitors to CPUC.	Monitoring throughout construction period, with monthly reporting.
	BIO.1b: Sempra Communications shall retain qualified biologists to conduct an environmental education program for construction crews and their supervisors before construction activities begin (including site preparation and staging of equipment and materials), and shall enforce construction restrictions described elsewhere in this section prior to construction.	Same as above	Submit outline and schedule of education program; document dates and attendance at education programs.	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	BIO.1c: In the majority of circumstances, trenching installation methods are expected to occur in existing public rights of way within urbanized areas. In some circumstances, trenching could occur in roadways immediately adjacent to habitat potentially occupied by special status species. Only rarely might trenching installation occur on land that is undeveloped. In these latter two circumstances, the following measures shall be applied to avoid or minimize impacts of noise and activity associated with trenching installation on special status species::	The construction site shall be monitored by theassigned Smpra Communications' inspector.	Reduce impact to sensitive biological resources	During construction activities.
	• All trenching shall be backfilled as soon as possible to prevent entrapment of animals. Any trench left overnight shall be covered or adequately fenced.	Same as above.	Same as above	Same as above
	• Trenches shall be inspected in the morning if the trench is inadvertently left open overnight, or if covering is incomplete. Alternatively, escape ramps may be used if approved by the biological monitor.	Same as above.	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• Only biological monitors may remove animals from trenches or from the work areas. Only biological monitors with specific permits from resource agencies may move listed specials status species.	Same as above.	Same as above	Same as above
	• Trenching spoils shall be placed within future disturbed areas or within the ROW.	Same as above.	Same as above	Same as above
	• Topsoils shall be stockpiled separately from other excavated soils. Ensure that backfilling occurs in the reverse order of excavation.	Same as above.	Same as above	Same as above
	• Revegetation, where required as a site-specific mitigation measure, shall be accomplished through replacement of topsoil and native species and erosion control measures must be in place prior to the first rain in the fall, or by October 15, whichever is earlier. Exceptions to this cut-off date may be applied for on a case by case basis	Same as above.	Same as above	Same as above
	BIO.1d: Minimum standards to reduce or avoid impacts from aerial installation:			

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• Avoid use of helicopters for OPGW cable installation during the breeding season of birds and bats or in areas that support species sensitive to noise (e.g. certain nesting raptors).	Same as above.	Same as above	Same as above
	• To the extent possible, previously disturbed sites within the project area and existing access roads shall be used by vehicles assisting helicopters in aerial installation. Storage of equipment, location of office trailers, parking of vehicles, and any other surface-disturbing activity shall take place within these previously disturbed areas. Parking and vehicle storage areas shall be delineated with flagging or other marking to minimize surface disturbance associated with vehicle off-road travel.	Same as above.	Same as above	Same as above
	BIO.1e: The following general construction guidelines will be implemented to reduce or avoid impacts to biological resources:	Same as above	Same as above	Same as above
	• Except on federal, state or county-maintained roads, vehicles shall not exceed 20 miles per hour.	Same as above	Same as above	Same as above
	• No firearms are allowed on site.	Same as above	Same as above	Same as above
	• No pets are allowed on site.	Same as above	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• All food items shall be contained and removed from the site daily to prevent attracting wildlife to the site.	Same as above	Same as above	Same as above
	• Prior to construction each access route and construction area (or other area defined by biologist) shall be clearly flagged, signed or staked, limiting construction activities to the areas designated on the pre-construction plan.	Same as above	Same as above	Same as above
	• If flags or staking are required to demarcate/delineate natural or undisturbed habitat, then construction activities shall be restricted to the Right-of Way (ROW), or the future site of associated facility, with work area boundaries delineated with flagging or other marking to minimize surface disturbance.	Same as above	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• The area of disturbance shall be confined to the smallest practical area, considering topography, placement of facilities, location of burrows, public health and safety, and other limiting factors. To the extent possible, previously disturbed sites within the project area shall be used for the stockpiling of excavated material, storage of equipment, digging of slurry and burrow pits, location of office trailers, parking of vehicles, and any other surface-disturbing activity. Work area boundaries, including parking and vehicle storage, shall be delineated with flagging or other marking to minimize surface disturbance associated with vehicle off-road travel.	Same as above	Same as above	Same as above
	• Erosion control measures (e.g., netting or staking) shall be placed along new roadways if within sensitive plant areas and road outslopes exceed 20%.	Same as above	Same as above	Same as above
	• When working near or above streams (<100 feet), do not move earth within 24 hours of a predicted storm.	Same as above	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
BIO.2: Installation of cable and supporting equipment and other facilities within or adjacent to stream crossings, riparian habitats, and wetlands could result in permanent or temporary adverse effects to special status wildlife species associated with these aquatic and riparian habitats.	**BIO.2a:** Wherever feasible, avoid riparian and wetland habitats that support special-status aquatic species by establishing, maintaining, and observing exclusion zones. If avoidance of riparian and wetland habitats is possible through directional bore or jack-and-bore methods, the following measures would apply:			
	• If an amphibian/reptile exclusion fence is required to prevent migration of listed amphibians or reptiles into the construction area, the fence shall be constructed under the direction of a qualified biologist. The fence shall be constructed of 4x8-foot or 4x10-foot plywood sheets and be located to avoid all burrows. It shall extend three feet six inches above the ground and six inches below ground. The fence shall be supported sufficiently to maintain its integrity, and maintained in good condition for the duration of ground-disturbing activities, including site restoration or revegetation following construction. The biological monitor will indicate when fences may be removed.	Project proponent would retain qualified biologists to perform compliance monitoring and reporting during construction.	Submit names and qualifications of monitors to CPUC.	Monitoring throughout construction period, with monthly reporting.

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• A biological monitor shall visit each wetland or stream boring site at least once daily during construction, with continuous monitoring at streams that support fisheries habitat or provide habitat for special status species. The monitor will check exclusion fencing to ensure that it is intact. The biological monitor shall ensure that all provisions of the state and/or federal wetlands permits are followed and that an adequate setback of at least 20 feet is observed at wetland and/or riparian (woody vegetation) edges that provide suitable habitat for sensitive species. This setback distance is considered an initial guideline which may be modified at specific sites following informal consultation with federal and state resource agencies, and as new information becomes available regarding wildlife habitat use. In addition, because a resource specialist will inspect all stream crossings prior to construction, additional sites that were not initially identified as potential habitat may be identified as special status species habitat at a later time.	Same as above	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• In the event that equipment is required to operate in any watercourse with flowing or standing water for any reason (for example, cleanup of an accidental bentonite clay spill), a biological resource monitor shall be present at all times to alert construction crews to the possible presence of sensitive species at risk during boring operations. If any harm or harassment to occupied aquatic habitat could occur, the monitor shall immediately and directly notify the construction supervisor to halt the activity and the construction technique modified to eliminate any chance of harm to the species. In the case of an accidental substance release into one of these streams, resource agencies shall be contacted immediately.	Same as above	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• To avoid affecting habitat that may support sensitive aquatic species, impacts on woody riparian vegetation may be avoided by boring underneath drainages that support this habitat type. A minimum 20-foot-wide setback shall be established and staked by a resource specialist before construction activities. This buffer shall extend between the edge of the woody riparian vegetation and construction exclusion fencing. Equipment shall be located beyond this point.	Same as above	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• Woody riparian vegetation close within the vicinity of subsequent activities that could be indirectly or inadvertently affected by construction operations shall be protected by installation of temporary fencing or staking and flagging of a minimum 20-foot-wide setback. Depending on site-specific conditions, this buffer may be narrower than 20 feet (e.g., in the case of a concrete-lined ditch) or wider than 20 feet (where special status species may be present), as determined by a qualified biologist. At locations where equipment access (e.g., bore entrance and exit pits) is located entirely within roads and no sensitive resources are present, no stream setback distances may be required. Identification and protection of woody riparian vegetation close to the work zone shall include either flagging or fencing, depending on site-specific conditions. The resource monitor shall confirm that protective measures are in place at specific work locations before construction activities begin at each crossing site. Protective fencing shall remain in place until all construction activities in the area are complete. No woody vegetation greater than one inch in diameter shall be removed from stream corridors without permission from CDFG (see Mitigation Measure BIO-11a)	Same as above	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• Confine construction equipment and associated activities to the designated construction areas in areas that support sensitive resources. In areas that support sensitive biological resources (e.g., areas that support riparian and wetland communities and special-status species), the area of disturbance shall be confined to the smallest practical area, considering topography, placement of facilities, public health and safety, and other limiting factors. Work area boundaries shall be delineated with flagging or other marking to minimize surface disturbance associated with vehicle straying and minimize the potential for inadvertent worker intrusion into sensitive areas. Special habitat features identified by the resource monitor shall be avoided to the extent possible and previously disturbed areas within the work site shall be utilized for stockpiling excavated materials, equipment storage, and vehicle parking. During the worker environmental education program, construction personnel shall be informed of the importance of maintaining a narrow work corridor. The resource monitors shall ensure that construction equipment and associated activities avoid any disturbance of sensitive resources outside the construction corridor.	Same as above	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• If construction is proposed in upland areas adjacent to potential breeding habitat for listed species or candidate species for listing, a qualified wildlife biologist will conduct pre-construction surveys of these areas for aestivation habitat for these species. If feasible within the context of the work area, aestivation areas would be temporarily fenced and avoided. At locations where aestivation burrows are identified and cannot be avoided, aestivation burrows of non-listed species (*i.e.*, California tiger salamander) would be excavated between May and October by hand prior to construction and individual animals moved to natural burrows or artificial burrows constructed of PVC pipe within 0.25 miles of the construction site. **BIO.2b:** If avoidance of aquatic or riparian habitats with the potential to support non-listed special-status aquatic species is not feasible, the following would apply:	Same as above	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• Construction activities will occur between March and October when water flow is absent or at its lowest level unless otherwise negotiated with responsible agencies.	Same as above	Same as above	Surveys shall be conducted prior to construction.
	• Prior to construction, a qualified biological monitor will survey the construction area, including aquatic habitat and adjacent upland habitat, for special-status species.	Same as above	Same as above	Same as above
	• If non-listed special-status species are identified within the construction area, the biological monitors will temporarily relocate individuals upstream of the construction site, and temporary barriers will be placed around the construction site to prevent ingress.	Same as above	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	BIO.2c: If avoidance of aquatic or riparian habitats with the potential to support listed aquatic species is not feasible, a plan to avoid or reduce adverse impacts to these species will be developed through informal consultation with CDFG, USFWS, and NMFS, depending on the species potentially present at the site. If a Programmatic Biological Opinion (PBO) has been developed for specific listed species potentially present at the site (i.e. California red-legged frog, giant garter snake, vernal pool fairy shrimp), measures from this PBO such as seasonal restrictions, pre-construction surveys, worker environmental education sessions, biological monitoring, and revegetation programs will be included in the plan.	Same as above	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
BIO.3 Construction that occurs within or adjacent to habitat that supports nesting birds or breeding bats may disrupt breeding behavior and cause nest/roost abandonment and loss of young.	**BIO.3a:** If construction activities are scheduled during the non-breeding season (generally September through January, but this is subject to case-by-case consideration of the breeding activity) within or adjacent to habitats that may support protected nesting bird or roosting bat species, mitigation is only required for certain species for which CDFG or USFWS has established non-breeding season protocols (i.e. burrowing owl). Measures such as avoidance and passive relocation of species, which are included in these protocols, will be required for construction activities within or adjacent to suitable habitat.	The construction site shall be monitored by theassigned Smpra Communications' inspector.	Reduce impact to sensitive biological resources	During construction activities.
	BIO.3b: If construction activities are scheduled during the breeding season (generally February through August, but this is subject to case-by-case consideration of the breeding activity), a no-disturbance buffer zone would be established around active nests/roosts to avoid potential adverse effects on protected nesting birds and breeding bats. Helicopters would not be used to install fiber optic facilities during the breeding season in areas which may support breeding birds or bats.	Same as above	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
BIO.4 Construction that occurs within or adjacent to habitat that supports special status burrowing mammals may result in adverse impacts to these species.	**BIO.4a:** Pre-construction surveys of work areas within or adjacent to undeveloped areas determined to be potential habitat shall be conducted by qualified wildlife biologists trained to recognize burrows and dens of particular mammals, as well as tracks, scat and other diagnostic sign. A habitat assessment of the site shall be conducted by a qualified biologist to determine whether special-status mammal habitat, including burrows or dens, exists within proximity of the work area, and if so, whether the proximity, type of activity, and distance from the work could result in abandonment of the burrows or dens, depending on the species. **BIO.4b:** If potential habitat for special-status burrowing mammals (burrows, scat, tracks, or other diagnostic sign) is located within 0.5 miles of construction areas but greater than 200 feet from proposed activities, the following measures shall apply:	Project proponent would retain qualified biologists to perform compliance monitoring and reporting during construction.	Submit names and qualifications of monitors to CPUC as well as completed survey reports.	Prior to commencement of construction.

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• Exclusion fencing shall be constructed and maintained in good condition around construction areas. The temporary fence shall be constructed with typical silt fencing, and shall be substantial enough to deter animals from entering the work area and to prevent parking construction vehicles or staging or storage of construction materials on adjacent habitat. The location of the fence shall be determined by the biological monitor.	The construction site shall be monitored by theassigned Smpra Communications' inspector.	Reduce impact to sensitive biological resources	During construction activities.
	• All open trenches shall be covered and secured at the end of each work day. If trenches remain excavated overnight, temporary escape ramps shall be installed with a 2:1 slope or less or trenches shall be covered by steel plate or plywood and checked in the morning prior to construction to ensure that no wildlife species are inadvertently trapped.	Same as above	Same as above	Same as above
	• A biological monitor shall inspect the fences and trenches at a minimum of once a day. If listed species are trapped in the trenches, they can only be moved by biologists with appropriate permit or approval from USFWS or CDFG.	Same as above	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• If construction areas are located in paved roads or other highly disturbed ROW, exclusion fencing shall only be constructed around the construction area when adjacent potential habitat for special-status burrowing mammals is within five feet of the work area.			
	BIO.4c: If potential habitat for special-status burrowing mammals (burrows, scat, tracks, or other diagnostic sign) is identified within 200 feet of construction areas; tracking, night photography, or trapping surveys of all potential habitat will be conducted to determine presence or absence of special-status mammals. Survey methods will be consistent with USFWS and CDFG protocols and other agency guidelines, such as the USFWS *Standardized Recommendations for Protection of the San Joaquin Kit Fox* (USFWS, 1997).	Project proponent would retain qualified biologists to perform compliance monitoring and reporting during construction.	Submit names and qualifications of monitors to CPUC as well as completed survey reports.	During construction phase.

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	BIO.4d: If surveys identify special-status mammals within proposed construction areas, consultation with CDFG and USFWS will determine further measures for avoiding or reducing adverse impacts to these species. Measures will likely include seasonal restrictions, pre-construction surveys, worker environmental education sessions, biological monitoring, and revegetation programs.	Submittal of completed surveys to CDFG and USFWS.	Implementation of CDFG and USFWS recommendations.	During construction phase.
BIO.5: Construction that occurs within or adjacent to upland habitat that supports special status reptiles may result in adverse impacts to these species.	**BIO.5a:** If it is feasible for construction activities to avoid potential upland habitat for non-listed special-status reptiles, the following measures will exclude transient reptiles from the construction area.			

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• Exclusion fencing shall be constructed and maintained in good condition between construction areas and potential habitat for special status reptiles. The temporary fence shall be constructed with typical silt fencing, and shall be substantial enough to deter animals from entering the work area and to prevent parking construction vehicles or staging or storage of construction materials on road shoulders adjacent to habitat. The location of the fence shall be determined by the biological monitor	Project proponent would retain qualified biologists to perform compliance monitoring and reporting during construction.	Submit names and qualifications of monitors to CPUC.	During construction phase.
	• All open trenches shall be covered and secured at the end of each work day. If trenches remain excavated overnight, temporary escape ramps shall be installed with a 2:1 slope or less or they shall be covered by steel plate or plywood. All excavated trenches shall be checked in the morning prior to construction to ensure that no wildlife species are inadvertently trapped	Same as above	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• A biological monitor shall inspect the fences and trenches at a minimum of once a day. Any reptiles trapped in the trenches shall be moved outside the construction area	Same as above	Same as above	Same as above
	BIO.5b: If it is not feasible for construction activities to avoid potential upland habitat for special-status reptiles (or State Fully Protected reptiles), transect or trapping surveys for these species and other measures for avoiding or reducing adverse impacts to these species will be developed through consultation with CDFG and USFWS.	The project proponant shall coordinate with CDFG and USFWS and conduct surveys.	Submit completed survey reports to CPUC.	During construction phase, but prior to commencement of construction in areas where it is not feasible to avoid potential upland habitat.
BIO.6: Construction that occurs within or adjacent to habitat that supports special status invertebrates may disrupt these species at vulnerable stages of their life cycle, or may eliminate host plants that are essential for completion of their life cycle.	**BIO.6a:** Prior to construction activities within or adjacent to potential habitat for special status invertebrate, a qualified wildlife biologist will conduct a survey for host plants occurring within 100 feet of proposed construction activities.	Conduct surveys for host plants	Submit completed survey reports to CPUC	Prior to commencement of construction adjacent to potential habitat for special status.
	BIO.6b: Wherever feasible, fence off and avoid removal of plants which may support special-status invertebrates during any stage of their life cycle.	Construction sites will be monitored by designated Sempra Communications Inspector	Avoidance of plants which may support special-status invertabrates	Throughout construction phase.

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	BIO.6c: If avoidance of host plants is not feasible, a plan to avoid or reduce adverse impacts to sensitive invertebrate species will be developed through informal consultation with CDFG and USFWS. If a Programmatic Biological Opinion (PBO) has been developed for specific listed species potentially present at the site (*i.e.*, valley elderberry longhorn beetle), measures from this PBO such as seasonal restrictions, pre-construction surveys, worker environmental education sessions, biological monitoring, and revegetation programs will be included in the plan**.** If a survey protocol has been developed for specific listed species potentially present at the site (*i.e.* Quino checkerspot butterfly), this survey protocol will be carried out where applicable	Coordinate with CDFG and USFWS to prepare plan.	Submit a copy of the plan to CPUC.	During construction phase.
BIO.7: Construction activities have the potential to disturb or result in the mortality of special-status plant species	**BIO.7a:** A qualified botanist shall conduct focused surveys for special-status plants during the period of identification for those species potentially occurring within undeveloped areas proposed for construction.	Conduct surveys.	Submit a copy of completed survey reports to CPUC	Prior to construction and during the period of identification for the species.

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	BIO.7b: If special status plants are identified within 100 feet of proposed construction activities and these plants can be avoided by construction, the following protective measures would be implemented:			
	• Exclusion fencing shall be constructed and maintained between the plants and the construction area to create an effective buffer against all construction-related activity.	The construction crew will be monitored by designated Sempra Communications' inspector	Same as above	Prior to construction
	• A qualified botanist shall hold tailgate environmental education sessions with construction personnel to inform them of special status plant species in the project area. These training sessions shall also include the locations of these sensitive resources, resource avoidance, permit conditions, and possible fines for violations of state or federal environmental laws	Project proponent will arrange for worker education program	Submit outline and schedule of education program, and document dates and attendance.	Prior to and during the construction phase.
	BIO.7c: If special status plants are identified within proposed construction areas and avoidance of these areas is infeasible, the following measures would apply:			

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• The CDFG and USFWS, as applicable, shall be consulted to develop an acceptable plan for transplant, salvage, cultivation, or re-establishment of the species at suitable sites. In some cases involving State-listed plants, it may be necessary to obtain an incidental take permit under Section 2081 of the Fish and Game Code. The level of commitment may vary depending on the sensitivity of the species (its rarity or endangerment status), its prevalence in the area, and the current state of knowledge about overall population trends and threats to its survival.	The project proponent shall coordinate with CDFG and the USFWS	Submit completed plan to the CPUC	Prior to construction.
	• A detailed monitoring and reporting plan also will be a required component of any acceptable plan. Local jurisdictions (such as city or county parks or open space management, public works, or maintenance departments) may also need to coordinated to ensure that any new population locations are protected	Prepare a moniring and reporting plan.	Submit detailed monitoring and reporting plan to CPUC	Prior to construction

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• For special-status plants, topsoil would be salvaged and stored prior to construction, then re-spread following construction and implementation of other appropriate site restoration measures (such as final grading, soil scarification, and erosion control). In those situations where post-construction monitoring indicates topsoil respreading has not resulted in successful re-establishment of special status plants, then seeds or cuttings of the species shall be gathered from nearby populations, and shall be used to in a cultivation and planting program that is appropriate for the horticultural requirements of the species. Re-introduction of the plant would be accomplished through sowing of seeds or planting of cultivated plants in the construction area or in another suitable location for which long-term site protection can be ensured. The restored area shall be comparable in size, soil type, exposure, dominant vegetation, and other critical habitat elements to the source population. Control of exotic weeds shall be implemented to prevent degradation of the habitat for native species. All components of the revegetation plan shall be subject to approval of the California Department of Fish and Game or U.S. Fish and Wildlife Service	Project proponent will retain a qualified biologist to gather seeds and oversee revegetation.	Submit names and qualifications of biologists to CPUC	Following completing of construction

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	BIO.7d: If special status plants are identified greater than 100 feet from proposed construction activities, including access routes, then standard avoidance measures shall be implemented prior to construction.	Implement Standard Avoidance measures.	Avaidance of special status plants	Prior to commencement of construction
BIO.8: Increased sediment and pollutant loads from site development in surface runoff and stormwater could decrease habitat quality for special-status fish species in drainages and other water bodies downstream from construction areas.	**BIO.8a:** Sempra Communications shall prepare and implement a SWPPP for the project as required by the appropriate Regional Water Quality Control Board (RWQCB) under its NPDES general permit. The SWPPP shall be updated as needed to reflect changes in the project design and site conditions. Development of the SWPPP is considered further in Section 4.8, Hydrology and Water Quality.	Prepare SWPPP	Submit a copy of the completed SWPPP to the CPUC	Prior to commencement of construction

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
BIO.9: Construction activities may result in the destruction or adverse modification of areas designated by USFWS and NMFS as critical habitat for listed plant and wildlife species.	**BIO.9a:** Wherever feasible, subsequent activities will be designed to avoid construction activities within or adjacent to critical habitat as designated by USFWS and NMFS. If avoidance is not feasible, informal consultation with USFWS and CDFG will determine a mitigation strategy to ensure that construction activities do not result in the destruction and adverse modification of the value of the habitat or affect the survival and recovery of any listed plant and wildlife species. Measures are likey to include seasonal restrictions, reduced construction corridors, pre-construction surveys, worker environmental education sessions, biological monitoring, and re-vegetation programs.	Project proponent will consult with the CDFG and USFWS.	Submit documentation of correspondance with agencies and final recommendations	Prior to construction adjacent to critical habitat
BIO.10: Construction activities have the potential to adversely affect sensitive natural communities, including but not limited to perennial and alkali grasslands, coastal scrub, riparian forest, riparian woodland, riparian scrub, freshwater marsh (freshwater emergent marsh), saltmarsh (saline emergent wetland), and seasonal wetlands including vernal pools.	**BIO.10a:** Removal of sensitive natural communities will be avoided wherever feasible. If removal of this habitat is not feasible, only the minimum area necessary to complete the work will be subject to disturbance. Consultation with USFWS, CDFG, and other agencies, as applicable, will determine appropriate compensatory mitigation including habitat restoration, revegetation, conservation easements, and habitat replacement ratios both on-site and off-site.	Same as above	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
BIO.11: Construction activities could potentially result in direct impacts to waters of the United States or waters of the state, including wetlands.	**BIO.11a:** If construction activities will result in the placement of dredged or fill material into waters of the U.S. or waters of the State , the following measures will apply:	Retain a qualified biologist to prepare the delineation.	Submit a copy of the IS. Army Corps permit to the CPUC	Prior to construction
	• A formal delineation of jurisdictional features shall be conducted by a qualified biologist. The delineation shall be submitted to the U.S. Army Corps of Engineers for verification and a Department of the Army permit shall be obtained. In addition, Water Quality Certification shall be obtained from the Regional Water Quality Control Board.			
	• If necessary, a Streambed Alteration Agreement shall be obtained from the California Department of Fish and Game		Submit a copy of the Streambed Alteration Agreement to the CPUC	Prior to construction
	• Construction operations shall be conducted during the dry season to minimize erosion.		Submit a copy of construction schedule to CPUC.	Prior to construction

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• The top layer of the drainage or wetland bottom shall be stockpiled and preserved during construction. After the pipeline has been installed, the stockpiled material shall be placed back into the drainage or wetland feature to return the beds to their original composition.	Construction crews will be monitored by a designated Sempra Communications inspector		During construction
	• Crossings shall be oriented as close to perpendicular (90 degree angle) to the drainage or seasonal wetland as feasible.	Same as above		During construction
	• Disturbed drainages and seasonal wetland habitat shall be revegetated with the appropriate plant species as soon as feasible after completion of construction activities.	Project proponent will retain a qualified biologist to gather seeds and oversee revegetation.	Submit names and qualifications of biologists to CPUC	Following completing of construction
	• Boring activities shall be closely monitored for loss of boring fluid. If a leak occurs, boring activities will be immediately halted until boring fluid is contained	Construction crews will be monitored by a designated Sempra Communications inspector		During construction

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
BIO.12: Construction activities have the potential to result in adverse impacts to trees protected by local ordinances.	**BIO.12a:** Mitigation for project impacts to protected trees shall include measures for tree protection, revegetation, compensation and monitoring consistent with local ordinance requirements. Sempra Communications will develop and implement a Tree Protection Plan to prevent impacts to protected trees adjacent to construction areas, and a Tree Revegetation Plan to mitigate for protected trees removed during project construction.	Develop Tree Protection Plan	Submit a copy of the completed plan to the CPUC	Prior to construction
CULTURAL RESOURCES				
CUL-1: Possible adverse changes to the significance of historical resources. (applies specifically to historic buildings that may be affected by placing connections into historic structures thus altering their physical and aesthetic qualities or a change in their context/setting).	**CUL-1a:** Avoid historical building sites for installation of cable connections, prohibit structural or architectural modifications that would alter the architectural or aesthetic qualities of the building or design additions or modifications in such a manner as to be consistent with the architectural style.		The National Register of Historic Places, the California Historical Landmarks (CHL), the California Points of Historic Interest, and the State Historic Inventory	Prior to construction
CUL-2: Possible substantial effects can occur to known, but unevaluated prehistoric and historic archaeological deposits from ground disturbing construction operations (construction related impact, particularly open trenches and portals for directional boring within specified sensitive areas).	**CUL-2a:** Conduct pre-construction archaeological testing (or perform construction monitoring by a Native American and qualified archaeologist in built environments where ground surfaces are currently occluded by pavement and/or landscaping, and therefore may preclude field survey or resource evaluation/testing).	Findings from pre-construction testing would be submitted.		Testing should be performed as early as possible in the planning stages but after a 75-80% engineering threshold is met.

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
CUL-3: Possible substantial effects to potential, poorly recorded, or possibly badly disturbed prehistoric and historic archaeological deposits from ground disturbing construction operations (construction related impact, particularly open trenches and portals for directional boring within specified sensitive areas).	**CUL-3a:** Conduct archaeological monitoring.	Weekly and monthly monitoring logs will be prepared and submitted. At the conclusion of monitoring, a comprehensive monitoring report will be prepared.	The monitoring will be determined to be effective if construction impacts are minimized, if the paleontological monitor has adequate opportunity to evaluate any discoveries, and if discoveries are properly removed and curated.	Monitoring will occur during all stages of ground disturbance in those areas determined to be sensitive. In instances where POPs are installed subsequent to cable conduits, additional monitoring may be required at that time.
CUL-4: Potential location or disturbance of unique paleontological resources during construction.	**CUL-4a:** Conduct paleontological monitoring.	Weekly and monthly monitoring logs will be prepared and submitted. At the conclusion of monitoring, a comprehensive monitoring report will be prepared.	The monitoring will be determined to be effective if construction impacts are minimized, if the paleontological monitor has adequate opportunity to evaluate any discoveries, and if discoveries are properly removed and curated.	Monitoring will occur during all stages of ground disturbance in those areas determined to be sensitive. In instances where POPs are installed subsequent to cable conduits, additional monitoring may be required at that time.

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
CUL-5: Possible substantial effects to human burials from ground disturbing construction operations	**CUL-5a:** Implement Mitigation Measure CUL.3a.	Discoveries of human remains during monitoring or testing will be reported to the local Coroner's Office and to the Native American Heritage Commission. The Most Likely Descendant (MLD) will be actively involved in the evaluation process. A report will be completed and filed for each discovery.	The actions shall be determined to be effective when state and local laws regarding removal of burials are complied with and when the consultation process with the MLD is completed.	Could occur at any time during construction that involves ground disturbing activities. It is assumed that the greatest potential for the discovery of human remains is in the areas identified as sensitive.
GEOLOGY, SOILS, MINERAL RESOURCES, AND SEISMICITY				
GEO-2: Construction operations and periodic repair operations could result in temporary accelerated erosion and sedimentation from soil disturbance and vegetation removal.	**GEO-2a:** Implement **Mitigation Measures HYD.1a and BIO.8**	Prepare SWPPP	Submit a copy of the completed SWPPP to the CPUC	Prior to commencement of construction

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
HAZARDS AND HAZARDOUS MATERIALS				
HAZ-1: Possible temporary exposure to or release of hazardous materials during construction.	**HAZ-1a:** Ensure proper labeling, storage, handling, and use of hazardous materials.	Submit to PUC copies of hazardous material management/spill prevention plan, dust abatement program and health and safety plan. Health and safety plan shall designate individual with responsibility for hazardous material compliance.	Reduce potential for accidental release of hazardous material.	Prior to commencement of construction activities.
	HAZ-1b: Report all significant releases or threatened releases of hazardous materials.	Same as above.	Same as above.	Same as above.
	HAZ-1c: Implement dust abatement program.	Same as above.	Reduce potential for exposure to hazardous materials.	Same as above.

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
HAZ-2: The project could require disposal of potentially contaminated soils.	**HAZ-2a:** Conduct a list search of all subsequent activities requiring excavation.	Submit to PUC a summary report with maps indicating areas of high potential for contamination, where excavated material will be assessed prior to disposal. The summary report shall contain a description of the assessment methodology and a response procedure to be followed if contaminated soil or groundwater is encountered.	Ensure proper disposal of any contaminated excavation material that would meet the definition of a hazardous waste.	Same as above.
	HAZ-2b: Characterize excavated materials for disposal.	Same as above.	Same as above.	Same as above.
	HAZ-2c: Test groundwater.	Same as above.	Same as above.	Same as above.
HAZ-6: Possible Safety Hazard Due to Helicopter or Other Aircraft in the Vicinity of Public or Public-Use Airport.	**HAZ-6a:** Undertake all flight operations in accordance with federal air administration safety and flight regulations.		Reduce potential for accidents due to aircraft.	During construction and installation.
HAZ-7: Possible Temporary Exposure of People or Structures to Wildland Fires	**HAZ-7a:** Prepare a fire prevention and management plan.	Submit to PUC copy of fire prevention and management plan.	Reduce potential for fires.	Prior to commencement of construction activities.

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
HYDROLOGY AND WATER QUALITY				
HYD-1: Installation of fiber optic cable facilities could cause erosion and transport of sediments to local water resources during construction activities.	**HYD.1a:** The following Installation of temporary erosion control devices and water diversion techniques shall be implemented during construction:			
	• Temporary dewatering of creeks. Appropriate measures will be taken to maintain near normal downstream flows and to minimize flooding by using cofferdams and a temporary culvert. Diversion of streamflow will be accomplished by utilizing a barrier and temporary culvert capable of permitting upstream and downstream aquatic life movement and maintaining existing stream flow rates.	Review contract specifications for presence of erosion control measures.	Minimize erosion and sedimentation in streams that are flowing during construction.	Concurrently with construction.
	• Installation of temporary erosion control devices will be an integral part of construction and will include the use of rolling dips and waterbars, silt fencing, straw bales, riprap, detention basin, and revegetation as appropriate.	Same as above	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• When the stream channel is altered during construction, its low flow channel shall be returned as nearly as possible to its natural state without creating conditions for future bank erosion, or a flat wide channel or sluice-like area shall be constructed.	Same as above	Same as above	Same as above
	• Locate spoil sites such that they do not drain directly into the drainages. **HYD.1b:** Implement **Mitigation Measure BIO.11**.	Same as above	Same as above	Same as above
HYD-2: Possible long-term erosion from decreased channel stability.	**HYD-2:** Implement **Mitigation Measures BIO.2a-c**	Project proponent would retain qualified biologists to perform compliance monitoring and reporting during construction.	Submit names and qualifications of monitors to CPUC.	Monitoring throughout construction period, with monthly reporting.
HYD-3: Possible water quality degradation from accidental spills of construction materials and equipment fluids.	**HYD-3a:** Crews will have containment and cleanup equipment (e.g., absorbent pads; mats; socks; pillows; granules; drip pans; and shovels) available at the staging areas and construction sites for use, as needed. Staging areas, where refueling, storage, and maintenance of equipment would take place, will not be located within 100 feet of drainages or any other body of water, or wetlands or riparian areas.	The construction site will be monitored by the assigned Sempra Communications' inspector.	Reduce potential for contamination from accidental spills.	Prior to and concurrent with construction activities.

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	Fluids drained from machinery during services at staging areas will be collected in leak-proof containers and disposed of at appropriate disposal or recycling facilities. No refueling or servicing will be done without absorbent material (e.g., absorbent pads, mats, socks, pillows, and granules) or drip pans underneath to contain spilled material. If these activities result in an accumulation of materials on the soil, the soil will be removed and properly disposed of as hazardous waste. If a spill is detected, simultaneous to implementing the containment measures, construction crews will contact the appropriate resource agency personnel. Spill areas will be restored to pre-spill conditions, as practicable, and spill documentation and reporting will be carried out.			

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
HYD-4: Possible water quality degradation and siltation from accidental seepage or spillage of drilling fluids into streams.	**HYD-4a:** Prior to directional boring activities near streams, containment and cleanup equipment (e.g., certified weed-free bales, sedimentation fencing, and portable pumps) will be present for use at the staging areas and construction sites, as needed. Portable pumps will be kept on site to control seepage to the surface beyond the straw bales and to prevent the mixture from entering streams or wetlands. At high-risk boring location, damming and flume materials will be pre-staged. During directional boring activities near streams, construction crews will monitor bentonite flow and returns so that fluid loss can be identified before the material surfaces in the stream channel.	Inspect construction sites weekly to ensure spill prevention and mitigation practices are being implemented.	Submittal of reports.	Weekly, during construction activities.
LAND USE AND PLANNING				
LUP-1: The project area includes numerous jurisdictions throughout California. The implementation of subsequent activities could result in possible conflicts with applicable local land use plans, policies, and regulations.	**LUP-1a:** The applicant shall comply with local, state, and federal plans, policies, and regulations. Compliance will be ensured through the implementation of the following systematic process for each proposed activity prior to construction:	The construction crew will be monitored by the designated Sigma Networks inspector.	The plans, policies, and regulations of local jurisdictions.	Will occur simultaneously with construction.

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• During the initial design stages of subsequent activities, the applicant shall consult with local planning staff to determine any required permits, and to assess the activity's consistency with relevant local land use plans, policies, zoning, and relevant ordinances. Preferred alignments for fiber optic facilities installation include previously disturbed right-of-ways in areas designated on applicable City and County Plans for industrial, office/professional, commercial, highway commercial, or public uses. Subsequent activities shall limit or avoid to the extent feasible interactions with residential, recreational, park and natural preserves (e.g. federal, state, county, or other natural areas). The applicant shall refer to **Appendix H** for guidance on applicable land use documentation (General Plan Land Use Element) for each local jurisdiction within the project area. In consultation with the appropriate planning agency, the following plans should be considered for applicability to subsequent activities:			

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	– Community, Specific, and/or Master Plans – Local Coastal Plan (if the activity enters the coastal zone) – Airport Land Use Plan (if the activity within 2 miles of an airport) – Infrastructure Improvement Plans – Regional Plans – Habitat Conservation Plan (HCP) and/or Natural Community Conservation Plan (NCCP) (the applicant shall consult with the regulating body to ensure project compliance.) The purpose of this consultation and plan review is to ensure conformity with local design, planning, and performance standards. The consistency analysis will also be used to determine which jurisdictions will require a condition use permit (CUP) or other discretionary action.			

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• In addition to consultation with local planning departments, the applicant shall also consult with local public works departments prior to the installation of any fiber optic cable facilities to determine the location, timing, and status of local infrastructure improvements. If possible, subsequent activities shall be designed for installation concurrently with other planned infrastructure improvements to avoid multiple disturbances within public rights of way. • Prior to the approval of subsequent activities, the applicant shall provide the CPUC with a report documenting the results of the consultation process with each relevant local jurisdiction as part of their work plan (Appendix B). The report shall include a list of local agencies consulted, the name of individuals consulted with each agency (including contact information), land use documents reviewed and the activity's consistency with the applicable plans, policies and ordinances.			
NOISE				

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
NOI-1: Subsequent activities could generate noise levels in excess of local standards during project construction and operation.	**NOI-1a:** Sempra Communications would require construction contractors to comply with the construction hours limitations and construction equipment standards set forth in the local general plan noise element and the noise ordinance of all applicable jurisdictions of cities and counties. For construction in those jurisdictions where there are no specific construction-related standards, Sempra Communications would require its contractors to limit noisy construction activity to the hours of 7:00 a.m. to 7:00 p.m., Monday through Saturday.	Review construction contract(s) to verify incorporation of local standards related to hours and days for construction and related to construction equipment noise standards, as applicable, or incorporation of default hours (7:00a.m. to 7:00 p.m., Monday through Saturday) in those jurisdictions that have no specific standards.	Document compliance with local construction noise requirements and regulations or project default requirements.	Prior to approval construction contract.
	NOI-1b: To reduce daytime noise impacts due to construction, Sempra Communications shall require construction contractors to implement the following measures:			
	• Equipment and trucks used for construction shall utilize the best available noise control techniques (*e.g.*, improved mufflers, equipment redesign, use of intake silencers, ducts, engine enclosures and acoustically-attenuating shields or shrouds, wherever feasible);	Same as above	Same as above	Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• Impact tools (*e.g.*, jack hammers, pavement breakers, and rock drills) used for construction shall be hydraulically or electrically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler on the compressed air exhaust shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible; and	Same as above	Same as above	Same as above
	• Construction equipment shall be located as far from sensitive receptors as possible.	Same as above	Same as above	Same as above
	NOI-1c: To the extent feasible, avoid use of helicopters for stringing OPGW cable on transmission towers in residential areas and other sensitive land uses.	Construction will be monitored by a designated Sempra Communications inspector.		During construction phase.

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	NOI-1d: If for any reason, construction activities adjacent to any noise sensitive receptors is expected to last more than a week, Sempra Communications shall establish a process for responding to and tracking complaints pertaining to construction noise with the following components:			
	• A procedure for notifying the local City/County Building Division staff and Police Department;		Submit a description of the procedure to the CPUC.	Prior to commencement of construction
	• A plan for posting signs on-site pertaining to permitted construction days and hours and complaint procedures and who to notify in the event of a problem;		Submit a description of the plan to the CPUC.	Same as above
	• A listing of telephone numbers (during regular construction hours and off-hours); and		Submit a copy of the contact list to the CPUC.	Same as above
	• The designation of a construction complaint manager for the project.			Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	NOI-1e: Upon determining the OP-AMP locations along an alignment, a more detailed, OP-AMP site specific noise analysis shall be conducted by a qualified noise analyst to determine the impact of the operation of HVAC equipment and the backup generators on the ambient noise level at nearby sensitive land uses. If the analysis indicates that the operational noise levels are expected to exceed the local noise standards, site-specific mitigation measures recommended by the analyst shall be implemented. The measures may not be limited to the following recommendations but could include some or all of the recommendations to reduce the impact on sensitive receptors to a less than significant level. Sempra Communications shall also be required to design the OP-AMP sites keeping in mind the following measures.	Retain a qualified noise analyst.	Submit a copy of the qualifications of the noise analyst to the CPUC, along with the determination of noise impacts for the OP-AMP site.	Prior to construction
	• Modify the air conditioning units or redesign the facility layout such that the air conditioning units would face away from sensitive receptors, to the maximum extent possible.	The construction site will be monitored by a designated Sempra Communications Inspector.		During construction phase.

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
	• Install generators that provide an equivalent noise reduction greater than the model assumed as the basis for this analysis so as to meet the local noise standards. The required equivalent noise reduction would be determined based on the results of the site-specific noise analysis,	Same as above		Same as above
	• Restrict the hours during which routine tests of the backup generators can be conducted to the less noise sensitive daytime hours.	Same as above		Same as above
NOI-2: Subsequent activities could expose sensitive receptors to localized groundborne vibration and groundborne noise.	**NOI-2:** Where OP-AMP stations would be located near sensitive land uses, Sempra Communications would install generators on top of isolation pads to reduce the impact of groundborne vibration and noise.	Same as above		Same as above
NOI-3: Subsequent activities could result in permanent increases in ambient noise levels from use of equipment at OP-AMP stations.	**NOI-3:** Sempra Communications would implement the measures listed under Mitigation Measure NOI-1e.	Same as above		Same as above

TABLE B-4
MITIGATION MONITORING TABLE (continued)

ENVIRONMENTAL IMPACT	MITIGATION MEASURES	MONITORING / REPORTING ACTION	EFFECTIVENESS CRITERIA	TIMING
RECREATION				
REC-1: Use of recreational facilities as staging or other work areas could cause or accelerate the physical deterioration of the facility.	**REC-1:** Sempra Communications shall avoid impacts on recreational facilities by maintaining all work areas within existing utility or roadway rights-of-way, unless required or otherwise authorized by the local city or county parks department or equivalent government entity. If work within a recreational facility is authorized, cleanup and repair of the facility will follow the requirements of the governing agency, in addition to the requirements of this Program EIR.	Same as above		Same as above